REMARKS

Applicant has amended the claims to more particularly define the invention taking into consideration the outstanding Official Action. Applicant notes that claims 6-10 and 12-13 are withdrawn from further consideration in view of the reply filed on October 27, 2006. The withdrawn claims have been canceled from the application without prejudice or disclaimer. Applicant retains their right to file a divisional application at a later time.

Applicant further notes that the drawings filed March 16, 2004 have been approved by the Examiner and receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d).

Applicant has amended claim 1 by incorporating the limitation of claim 2 into the claim and provided proper antecedent basis in the claim. Claim 2 has been canceled from the present application in view of the redundancy of the claim. Applicant submits that the claims now present in the application are fully supported by the specification as originally filed and no new matter is introduced.

The rejection of claims 1-5 and 11 under 35 U.S.C. 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention has been carefully considered but is most respectfully traversed in view of the amendments to the claim 1 as noted above. Accordingly, it is most respectfully requested that this rejection be withdrawn.

Applicant most respectfully submits that all of the claims now present in the application are in full compliance with 35 USC 112 and clearly patentable over the references of record.

The rejection of claims 1-5 and 11 under 35 U.S.C. 102(b) as being anticipated by Thompson has been has been carefully considered but is most respectfully traversed in view of the amendments to the claims and the following comments.

The present invention discloses a method for culturing organic blue-green algae and the preparation of its **culture medium, characterized in which no hydrogen carbonate, carbonate or other pH adjuster or buffer are added in the culture process**, and instead, **pH level of culture medium suitable for algae growth is achieved using fermented organic matter, agitation and aeration**. The most important is that **the culture medium contains no inorganic salts**.

In traditional algae cultivating method, Na_2CO_3, $NaHCO_3$, NaH_2PO_4 and other inorganic salts are added as nutrient, pH adjuster or buffer to obtain the desired pH level suitable for algae growth. But algae will absorb those **inorganic compounds and the residues of chemical fertilizer** in the dietary algae **are burdens to the human body**. It will be environmentally friendly, safer and healthier for the human body if dietary algae are grown in an organic environment having the desired pH level without the addition of artificial chemicals such s inorganic salts. The resulting algae will have higher nutritional value and provide more benefits (see pp. 2-3 of specification).

Thompson et al. teaches an improved controlled **natural purification system for a wastewater treatment** and protein conversion and recovery. The system consists of treatments in a tank complex where the **waste organics are reduced to inorganic forms** available for microalgae culture. The main purpose of the wastewater treatment system is to produce reusable water and algal by-product.

Referring to column 29, line 51, **reducing of CO_2 in solution can elevate pH value. The elevated pH (pH 9-10) causes the removal of phosphorus** from solution by the rapid formation and precipitation of insoluble phosphate without use or need of auxiliary chemicals. Therefore, Thompson teaches a method to eliminate excess phosphorus in wastewater by raising the pH value of solution.

In comparison, the present invention is not anticipated by Thompson for several reasons. First, the purposes of the invention are different. Thompson disclosed a

wastewater treatment, and the reusable water can be utilized to produce algae. However, the present invention is to provide **an improved method to cultivate organic blue-green algae**. In light that organic blue-green algae are **highly sensitive organisms**, the **culture technology and process significantly effect on the quality of culturing algae** (see page 1 of specification). Accordingly, culturing organic blue-green algae needs exact regulating technology, and not just cultivated in reused water without concern.

Furthermore, the cultivating methods are different. Thompson teaches treating the wastewater anaerobically and aerobically in a tank complex where **waste organics are reduced to inorganic forms available for algal culture**. Therefore, in Thompson, the algae are cultured in **inorganic environment**. However, in the present invention, dietary **algae are grown in an organic environment** having the **desired pH level without the addition of artificial chemicals**, such as inorganic salts by fermented and aerated to give the culture medium a pH of 8 or greater. It would be obvious to one skilled in the art that the two cultivating ways are totally different.

Finally, the pH adjustment is for a different purpose by a different method. Thompson teaches one method to elevate pH level in B-Tank which progress anaerobic-aerobic reduction of biochemical oxygen demand nutrient stabilization and denitrification. **By reducing CO_2 in solution to elevate pH level to 9-10, phosphorous in excess can be removed by precipitation**. However, in the present invention, to achieve suitable **pH level for cultivating organic blue-green algae**, the culture medium is fermented and aerated to give the culture medium a pH of 8 or greater and **NOT adding any inorganic salts**. Accordingly, the present invention has a different method and purpose to elevate pH level. In view of the above, the rejection should be withdraw.

In view of the above comments and further amendments to the claims, favorable reconsideration and allowance of all the claims now present in the application are most respectfully requested.

Respectfully submitted,
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April 20, 2007